

SOUTH DAKOTA EARLY LEARNING GUIDELINES FOR SCIENCE



The South Dakota Early Learning Guidelines for Science are based on the National Science Education Standards. Science provides the perfect opportunity for children to learn about the world around them and expand their interest and curiosity for learning. Children learn best through active engagement in meaningful, hands-on activities. Through science experiences they can learn how to organize information and solve problems. One of our goals is to help children to begin using the scientific method. This will happen as we encourage them to wonder, ask questions, predict, experiment to see if their predictions are correct, record their findings, and then reflect and draw conclusions based on the results of their findings. The National Research Council Report, *Eager to Learn: Educating Our Preschoolers*, reports that children's observations and predictions are the foundation of scientific inquiry. We want all children to feel they are capable of participating in scientific endeavors. We also want to help children develop an understanding of and deep respect for nature and their environment. Children learn best when we include science inquiry throughout the year and embed it naturally into our day-to-day activities. Science complements language, mathematics, and all areas of development; learning in one area strengthens the others. Choosing rich, science-related topics that children can investigate for themes and long-term projects, such as animal homes and recycling, can help children progress in all areas.

South Dakota Early Learning Guidelines for Science

STANDARD 1 ~ Science as Inquiry

As a result of their explorations and participation in simple investigations through play, children demonstrate their understanding of and ability to use scientific inquiry.

STANDARD 2 ~ Physical Science

As a result of their explorations and participation in simple investigations through play, children develop an understanding of properties, position, and motion of objects in the environment.

STANDARD 3 ~ Life Science

As a result of their explorations and participation in simple investigations through play, children develop an understanding of characteristics, life cycles, and environments of living things.

STANDARD 4 ~ Earth and Space Science

As a result of their explorations and participation in simple investigations through play, children develop an understanding of properties of earth materials, objects in the sky, and changes in the earth and sky.

STANDARD 5 ~ Science and Technology

As a result of their explorations and participation in simple investigations through play, children develop an understanding about science and technology, and the ability to distinguish between natural objects and objects made by humans.

STANDARD 6 ~ Science, Environment and Society

As a result of their explorations and participation in simple investigations through play, children demonstrate an awareness of and respect for the environment and how it can be changed. Children demonstrate an understanding that people use science to explore the world and answer questions.

STANDARD 1 ~ Science as Inquiry

As a result of their explorations and participation in simple investigations through play, children demonstrate their understanding of and ability to use scientific inquiry.

Benchmarks

1. Expresses wonder, asks questions, and makes simple predictions, such as whether an object will sink or float.
2. Observes and uses senses to explore materials and their environment both indoors and outdoors.
3. Uses simple tools and measuring devices, such as balance scales, thermometers, and rulers to explore the environment.

Setting up the Environment to Help Children Reach these Benchmarks

- Provide a science area where children can explore a variety of open-ended materials and use science tools, such as magnifying glasses, balance scales, levers, and rulers.
- Provide many hands-on experiences so that children are able to actively explore their environment.
- Take nature walks and observe details in the environment. Bring materials in and continue to observe, manipulate, discuss, and record observations.

Additional Strategies to Help Children Reach these Benchmarks

- Ask children open-ended questions, such as “What do you think will happen when you put this toy in the water?”
- Encourage children to wonder and ask questions. Model your own sense of wonder.
- Allow children to try to answer their own questions and solve their own problems by experimenting.
- Give children opportunities to taste, touch, smell, listen to, and see a variety of objects and materials.
- Encourage children to measure items with non-standards tools, such as paper clips or blocks, and with standard tools, such as rulers.
- Use thermometers to measure air temperature and the temperature of various containers of water. Encourage the children to describe the temperature as “hot” or “cold.”
- Extend activities that children are interested in over a period of days or weeks.
- Collect data and then make graphs frequently with the children, such as how many seconds it takes various objects to fall to the ground when dropped. Discuss and reflect with the children what the data they collected shows.

STANDARD 2 ~ Physical Science

As a result of their explorations and participation in simple investigations through play, children develop an understanding of properties, position, and motion of objects in the environment.

Benchmarks

1. Observes and uses words to describe physical changes, such as a solid turning to liquid.
2. Identifies similarities and differences of objects.
3. Describes the position of an object in relationship to other objects or him/herself.
4. Explores ways to move objects, such as pushing or pulling and can describe these motions.
5. Explores changes in sound and vibration, using their voice, instruments and other objects.
6. Explores magnets and their ability to attract and repel materials.

Setting up the Environment to Help Children Reach these Benchmarks

- Add several different types of magnets to the science area. Also add different kinds of materials that will and will not be attracted by them.
- Give children the opportunity to play and experiment with mixing color, using different types of paints, adding two colors together, adding white to other colors, etc.
- Provide toy cars and trucks for children to play with in the block area. Ask children to push and pull them and describe these actions as they do them.

Additional Strategies to Help Children Reach these Benchmarks

- Give children opportunities to play with ice cubes and watch them melt in their hands or the water table. Challenge them to try to keep them from melting as long as possible. Talk about the ice being a *solid*, and then melting into a *liquid*.
- Do cooking activities and talk about how the ingredients combine to make a new type of material.
- Do simple experiments with the children, such as adding vinegar to baking soda. Investigate other mixtures using water, flour, salt, etc. and ask children to predict what will happen each time.
- Give children objects or toys made of different types of materials, such as wood, metal, and paper, and ask them to sort them according to the material they are made of.
- Discuss positions with children as they play, talking about what objects are in front, behind, beside, or under them.
- Sing with children, asking them to sing very low and then very high, soft and then loud. Provide instruments that children can play and use to make different types of sounds.
- Make homemade instruments with children, using rubber bands around small boxes and dried beans inside two cups taped together.
- Provide opportunities for children to learn about light and rainbows by playing with prisms, flashlights, crystals, an overhead projector, or a clear dish of water in the sunshine.
- Encourage children to observe the shadows they make when they are outside playing. Place an object outside on a piece of paper and ask children to draw the object's shadow on the paper. Go out several more times throughout the day and ask children to draw the new shadow each time, discussing why it might have changed.

STANDARD 3 ~ Life Science

As a result of their explorations and participation in simple investigations through play, children develop an understanding of characteristics, life cycles, and environments of living things.

Benchmarks

1. Observes and classifies living things as animals or plants and uses words to describe them.
2. Demonstrates knowledge that living things have basic needs, such as food, water, and air.
3. Demonstrates knowledge that plants, animals, and humans live in environments that support their needs, such as fish living in water.
4. Recognizes that living things, including themselves, change and grow throughout their life cycles.
5. Recognizes and describes similarities between parents and their offspring. Matches pictures of animals and their babies.

Setting up the Environment to Help Children Reach these Benchmarks

- Find or purchase animals such as caterpillars or tadpoles, create an indoor environment for them, and observe their life cycles.
- Plant seeds and observe changes. Experiment by caring for the seeds differently, such as giving one no water, putting another in a dark area, etc.
- Add stethoscopes, examples of x-rays, etc. to the science area to allow children to learn about how their bodies work.

Additional Strategies to Help Children Reach these Benchmarks

- Provide examples of different kinds of plants and animals and talk about their differences and similarities.
- Take trips to places where children can observe plants and animals: a pet store, playground, backyard, gardens, or the zoo.
- Make a graph showing the different environments where animals live, including farm, forest, and river. Children could add pictures of the animals to the graph according to their environment.
- Observe and compare non-living and living things. Talk about what living things need as compared with non-living objects.
- Play games where children can match pictures of baby animals and people to their parents.
- Sing songs with actions, such as the “Hokey Pokey” where children can use and identify various body parts.
- Play in and sort autumn leaves.
- Give children opportunities to demonstrate their respect for living things and their environments by caring for pets, respecting each other, and protecting the environment.



STANDARD 4 ~ Earth and Space Science

As a result of their explorations and participation in simple investigations through play, children develop an understanding of properties of earth materials, objects in the sky, and changes in the earth and sky.

Benchmarks

1. Explores the properties of earth materials, such as sand and water through play.
2. Names objects in the sky, including sun, moon, clouds, and stars.
3. Describes differences between night and day.
4. Recognizes and describes current conditions and changes in the weather.
5. Observes and describes basic changes in the seasons.

Setting up the Environment to Help Children Reach these Benchmarks

- Set up a water table or large plastic container of water where children can play with various objects, such as funnels, cups, and water toys.
- Set up a sand table or large plastic container of sand where children can play with various objects, such as rakes, cups, and other sand toys.
- Decorate ceilings with glow-in-the-dark stars.
- Add rocks and magnifying glasses to the science area.

Additional Strategies to Help Children Reach these Benchmarks

- Give children opportunities to explore earth materials such as rocks, soil, sand, water, and snow. Look at rocks and other materials on nature walks.
- Provide opportunities for children to mix and play with sand and water outside.
- Read books about night and day, stars, sun, moon, and space.
- Make stars, moon, and clouds from a variety of materials, such as paper mache. Help children expand their vocabulary by describing the various objects and shapes as they construct them.

- Encourage children to notice differences between night and day by doing activities such as: turning off the lights; going outside; and allowing children to explore using flashlights, prisms, and sunglasses.
- Ask children to describe the current weather and keep track of the weather on a daily basis on a chart. Ask children to make predictions about the future weather.
- Play outside during different seasons and observe changes. Play in the leaves and snow.

STANDARD 5 ~ Science and Technology

As a result of their explorations and participation in simple investigations through play, children develop an understanding about science and technology, and the ability to distinguish between natural objects and objects made by humans.

Benchmarks

1. Uses tools/objects in the environment to solve problems or complete tasks.
2. Uses the computer and other technology, if available, to explore how their actions can cause an effect.
3. Can identify some objects as being found in nature and others as made by people.

Setting up the Environment to Help Children Reach these Benchmarks

- Choose high quality, developmentally appropriate software, such as those recommended at www.childrenandcomputers.com. Use programs such as Kid Desk from Edmark, so children can only access programs you want them to use.
- Give children the opportunity to type words on the computer, including their names and signs and labels for the dramatic play area. This can be done using your regular word processing program with large font.
- Give children opportunities to explore new uses for materials, such as using an empty margarine container as a boat in the water table.

Additional Strategies to Help Children Reach these Benchmarks

- Point out technology that we use in our daily lives, including computers, CD players, and electronic toys.
- Use various devices with the children, such as an apple-peeler and an apple-peeling machine. Make ice cream with an old-fashioned, hand-operated ice cream maker or by hand, and then with an electric machine.
- Provide opportunities for children to solve everyday problems using objects in their environment, such as choosing to use a plastic fork to make stripes on a play-dough zebra. Ask children to evaluate how well their tool worked.
- Encourage both boys and girls to explore and play games with appropriate software. Many computers are equipped with a Paint program that also allows children to draw, type, and paint. Working in pairs encourages social interaction, joint problem solving, and language development.
- Encourage children to dictate letters to family members and type them on the computer. With the children, write or e-mail another group of preschool children and become technology pen pals.

- Occasionally have children help you record data in a chart on the computer, print, and display at the children's eye-level.
- Talk about how the computer helps you. Describe how it helps you find information. Model for children how to look up a topic they are interested in or find resources to answer questions.
- Talk about cause and effect. Point out examples in day-to-day life such as: turning a knob to make a toy move or open a door; turning on a mixer to stir ingredients; and using switches to cause an effect, such as turning on a light.
- Take a walk and talk about which things are found naturally in the environment and which people have made. Graph and discuss your findings together when you return.

STANDARD 6 ~ Science, Environment and Society

As a result of their explorations and participation in simple investigations through play, children demonstrate an awareness of and respect for the environment and how it can be changed. Children demonstrate an understanding that people use science to explore the world and answer questions.

Benchmarks

1. Demonstrates care and respect for the environment and all living things.
2. Demonstrates knowledge that their actions and actions of others can change the environment.
3. Recognizes ways to recycle and reuse materials.
4. Demonstrates understanding that everyone can use science to explore and solve problems.

Setting up the Environment to Help Children Reach these Benchmarks

- Set up a recycling area in the room where children can put paper scraps and sort other recyclables by type.
- Set up an art area that includes materials such as paper towel rolls and plastic lids for children to reuse in their art projects.

Additional Strategies to Help Children Reach these Benchmarks

- Choose interesting science topics as themes and long-term projects that children can investigate over a period of weeks and months. Engaging topics may include rocks, insects, pets, recycling, weather, seasons, and bubbles.
- Encourage children to clean up their environment by clearing the table and picking up toys and litter.
- Make recycled paper with newspaper or paper scraps by soaking the paper overnight in water. Blend the paper pulp in a blender and pour onto an old window screen. Allow several days to dry.
- Visit a recycling center if available.
- Encourage children to use both sides of a sheet of paper.

- Talk with children about the fact that science is the way we find out about the world and that both boys and girls are good at science.
- Talk about important inventors, astronauts, and scientists, including both men and women, such as George Washington Carver and Sally Ride.

Adaptations for Individual Children

- Make sure every child has physical access to all science materials, including outdoor areas. Consider moving the sand and water tables to the floor if it will provide better access.
- Supervise children when they handle living things.
- Use visual cues and body language to convey meaning.
- Add handles to tools to make them easier to grip and use.
- Break activities down into small steps and give clear directions.
- Help children participate in activities by asking them to complete one step at a time or any parts they can complete.
- Give children sensory materials in jars, bottles, or plastic bags to allow them to explore the materials without touching them if they prefer not to touch them.
- Use equipment such as a modified keyboard or mouse to make the computer accessible to all children.
- Provide picture directions for children to follow.
- Provide activities in a variety of settings. Allow children to work with materials such as the sensory table and art supplies both indoors and outdoors.



SOUTH DAKOTA EARLY LEARNING GUIDELINES FOR HEALTH AND PHYSICAL DEVELOPMENT

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

Introduction

Brain Research has demonstrated that Health and Physical Development contribute to all areas of children's development. The preschool years are an important time to help children develop healthy attitudes and habits toward food and exercise, which can last a lifetime. Preschoolers can also learn basic safety practices that will help them avoid and respond appropriately to potentially dangerous situations.

The National Association for Sport and Physical Education (NASPE) has developed the following guidelines for physical activity:

1. Preschoolers should accumulate at least one hour of daily structured physical activity.
2. Preschoolers should engage in at least 60 minutes and up to several hours of daily, unstructured physical activity and should not be sedentary for more than one hour at a time.
3. Preschoolers should develop competence in movement skills that are the building blocks for more complex movement tasks.
4. Preschoolers should have indoor and outdoor areas that meet or exceed recommended safety standards for performing large-muscle activities.
5. Individuals responsible for the well being of preschoolers should be aware of the importance of physical activity and facilitate the child's movement skills.

NASPE, 2001

NASPE suggests that children should experience the “joy of movement.” They need an environment where they have room to move freely and explore indoor and outdoor equipment. Children need to be active participants in structured and unstructured movement activities. Preschoolers need time to play and make choices from a variety of activities in a risk-free, non-competitive environment. Through indoor and outdoor play experiences and movement activities, children build muscles that control their overall balance, running, climbing, and jumping abilities. Children need an environment that provides many opportunities for them to choose activities that will also help them develop their fine motor skills. Over time, engaging in these activities will help children develop the strength, control, and eye-hand coordination necessary for reading and writing and self-help skills such as dressing.

One of the most effective ways for children to learn is by observing others. Parents, teachers, and caregivers can provide good role models for children by participating in and showing enjoyment in activities and by making healthy choices.

South Dakota Early Learning Guidelines for Health and Physical Development

Standard 1 ~ Health, Nutrition, and Safety

Children demonstrate healthy habits and safe practices.

Standard 2 ~ Gross Motor

Children engage in play and movement to develop gross motor skills.

Standard 3 ~ Fine Motor

Children engage in play to develop fine motor skills.

Standard 1 ~ Health

Children demonstrate healthy habits and safe practices.

Benchmarks

1. Recognizes and can identify nutritious foods.
2. Independently practices personal care and self-help skills, including washing hands, brushing teeth, toileting, dressing, and eating.
3. Knows how and when to alert adults to dangerous situations.
4. Recognizes basic safety symbols, including stop signs, red lights, and poison symbols.
5. Follows street, vehicle, and bike safety rules, such as looking both ways before crossing and using car safety seats and bike helmets.
6. Knows how to respond safely in emergency situations, such as fire, tornado, and in the presence of strangers and dangerous objects.

Setting up the Environment to Help Children Reach these Benchmarks

- Provide a cooking area where children can help prepare healthy snacks.
- Include examples of nutritious foods in the dramatic play area, such as plastic fruits and vegetables or empty food boxes.
- Give children plenty of time and space to complete routine self-care tasks, such as hand washing, brushing teeth, toileting, dressing to go outside, and eating.

Additional Strategies to Help Children Reach these Benchmarks

- Prepare healthy snacks and meals for children. Expose children to a wide variety of nutritious foods, including foods from several cultures. Offer new foods many times.
- Talk with children about which foods are healthy choices and which foods are not healthy.
- Give children opportunities during snacks and meals to practice pouring, using utensils, and serving themselves food.
- Point out safety signs and symbols in the environment and discuss what they mean.
- Discuss the importance of wearing bike helmets and using car safety seats. Encourage parents to bring bike helmets for their child to use.
- Practice looking both ways and using the crosswalk when crossing the street with children.
- Practice fire and tornado drills frequently. Establish a safe place to meet in case of a fire. Teach children how to safely stay with their group and caregiver while exiting to a safe location.
- Talk with children about dangerous objects, such as guns, knives, matches, fireworks, etc.
- Talk with children about the dangers of playing in cars, old appliances, trunks, or other dangerous areas.
- Advise children to never leave with someone they don't know unless their parent or caregiver has approved. Teach them to call out, "This is not my mom," or "This is not my dad" if someone tries to take them.

Standard 2 ~ Gross Motor

Children engage in play and movement to develop gross motor skills.

Benchmarks

1. Participates in play and movement activities and can describe how physical activity contributes to their overall health.
2. Demonstrates locomotor skills by walking, running, hopping, galloping, marching, and climbing.
3. Demonstrates stability, flexibility, and balance by standing on one foot, turning, stretching, bending, rolling, balancing, stopping, jumping, and twisting.
4. Demonstrates coordination when pedaling, throwing, catching, kicking, bouncing objects, and hitting objects with racquets or paddles.
5. Demonstrates increasing body strength and endurance in play and movement experiences.

Setting up the Environment to Help Children Reach these Benchmarks

- Set up the environment so children can choose activities that develop strength, endurance, coordination, and other gross motor skills. Include activities such as jumping, hopping, and throwing.
- Provide children with large areas to move and play in, both indoors and outdoors if possible.
- Provide safe tricycles and other safe wheeled vehicles for children to ride. Encourage parents to bring bike helmets for their child to use.
- Play music with different beats and from different cultures. Encourage children to move to the rhythm of the music. March and dance to the music.

Additional Strategies to Help Children Reach these Benchmarks

- Take walks with children, varying the pace and distance.
- Provide opportunities for non-competitive games and daily movement activities to allow children to practice motor skills repeatedly over a period of time.
- Encourage children to walk on balance beams, sidewalk cracks, and chalk lines on the ground both forward and backwards.
- Ask children to try standing on one foot for 5 seconds.
- Encourage children to stretch, bend, twist, and turn while keeping their feet in place.
- Give children opportunities to practice each skill in a variety of ways, such as throwing and kicking balls, beanbags, and other objects of different shapes, weights, and sizes.
- Provide opportunities for children to practice hitting balls with paddles, plastic bats, or racquets. Begin by having a stationary target, such as a large ball on the ground, gradually working up to a moving target.
- Encourage children to try new types of movement, such as skipping. Give them verbal cues, including “lift your knees,” “hop and land on one foot,” and “hop and land on the other foot.”

Standard 3 ~ Fine Motor

Children engage in play to develop fine motor skills.

Benchmarks

1. Participates in play and movement activities that enhance fine motor development.
2. Demonstrates eye-hand coordination through activities such as stringing large beads and completing simple puzzles.
3. Practices self-help skills, such as buttoning, zipping, and snapping.
4. Displays strength and control while using a variety of manipulative materials including scissors, pencils, crayons, small toys and connecting blocks.

Setting up the Environment to Help Children Reach these Benchmarks

- Set up the environment so children can choose activities that develop fine motor skills. Set up tables with puzzles, pegboards, large beads for stringing, and small blocks, such as Duplos.
- Add dress up clothes, dolls, and doll clothes to the dramatic play area where children can practice buttoning, zipping and snapping.
- Set up an art area where children have the opportunity to use crayons, washable markers, chalk, paintbrushes of various sizes, scissors, and other art materials.
- Set up a writing area with various kinds of paper, pencils, markers, and other writing tools.

Strategies to Help Children Reach these Benchmarks

- Encourage children to dress, button, snap, and zipper themselves.
- Provide activities that help children increase strength, such as putting old safety scissors and rolling pins at the play dough table.
- Do fingerplays with children such as “Where is Thumbkin” and “Five Little Ducks.”
- Work with children on effective ways to hold a pencil and scissors.

Adaptations for Individual Children

- Make changes to the environment and materials so that all children can participate. This might include providing an accessible soap dispenser and specialized writing tools or asking children to run a shorter route, making sure that each child feels equally capable.
- Ask parents about any special dietary needs. Talk with all the children in the group about respecting each other's health needs and special diets.
- Talk with children about safety issues regarding special equipment (wheelchairs, walkers, feeding tubes, etc.) both for the child using the equipment and for those nearby.
- Provide a variety of balls that are easy to grasp. If a ball is too heavy, use a lighter one, such as a beach ball.
- Attach a paddle to a glove for children who have difficulty grasping a racquet or paddle.
- Provide encouragement and many opportunities for practice. Use a variety of toys, equipment, surfaces, and settings.
- Provide clear, specific instructions for each step of an activity. Break down activities into smaller parts or fewer steps to allow all children to participate successfully.
- Make sure equipment is an appropriate size and at a level where all children can participate fully and safely.
- Make adaptations to writing instruments by placing masking tape, rubber grips or spongy padding around them. Provide thick crayons, and pencils and brushes with thick handles.
- Attach handles to objects to help children to grip them.
- Provide adaptive scissors, adaptive toys, knobbed puzzles and switches.
- Place a rubber mat or other non-slip surface under paper, puzzles, pegboards or other objects to help them stay in place while the child is working.
- Offer many strength-building experiences.
- Use eating utensils that are easy to use or add adaptations to handles to make them easier to use. Use rubber mats under plates to help them stay in place.

SOUTH DAKOTA EARLY LEARNING GUIDELINES FOR CREATIVE ARTS



The creative arts provide an avenue for children to express their own ideas, feelings and thoughts. Through the arts, children can find enjoyment in creating with a variety of materials, listening to and playing music, moving creatively, and engaging in dramatic play. Children's self-esteem increases as they participate in arts activities that encourage them to explore and create in a risk-free atmosphere. Research shows that when we give children opportunities to be creative with open-ended materials, their creativity blossoms. Giving children adult models and coloring book pages to simply fill in does not foster this creativity. We need to help parents understand that the process children go through as they create their art is more important than the final product they produce.

By giving children many opportunities to explore with a variety of materials and demonstrating art techniques, we can help children acquire the skills they need to be able to represent their thoughts and ideas. As they learn how to represent their thoughts and ideas, they begin to understand the concept that symbols can stand for something else. This understanding will help with literacy and mathematics understanding as they begin to make the connection that symbols, such as letters can stand for sounds and form letters. The schools in Reggio Emilia are renowned for their approach to helping children express themselves and represent their ideas through their artwork.

The arts can be integrated into all areas of the curriculum. Reading books that have words to songs, such as The Wheels on the Bus, or Mary had a Little Lamb, helps children acquire beginning literacy skills.

We want to help children develop an appreciation for the arts. This appreciation can broaden their perspective of the world. The arts can help children gain greater understanding and appreciation for diverse cultures, as well as their own. The arts may be able to deepen this appreciation more than most other areas of the curriculum.

South Dakota Early Learning Guidelines for Creative Arts

STANDARD 1 ~ VISUAL ARTS

Children use a variety of art materials for enjoyment and self-expression, and demonstrate an appreciation for art.

STANDARD 2 ~ MUSIC

Children engage in a variety of musical activities for enjoyment and self-expression, and demonstrate an appreciation for music.

STANDARD 3 ~ CREATIVE MOVEMENT

Children engage in a variety of creative movement activities for enjoyment and self-expression, and demonstrate an appreciation for various forms of expressive movement.

STANDARD 4 ~ DRAMATIC PLAY

Children engage in pretend play for enjoyment and self-expression, and demonstrate an appreciation for various forms of dramatic expression.

STANDARD 1 ~ Visual Arts

Children use a variety of art materials for enjoyment and self-expression, and demonstrate an appreciation for art.

Benchmarks

1. Uses a variety of materials for constructing, painting, drawing, and sculpting.
2. Demonstrates enjoyment and confidence in their ability to freely plan and create artwork of their own design.
3. Describes experiences, ideas, emotions, people and objects represented in their art work.
4. Uses words to describe their artwork in terms of color, line, shape, space, and texture.
5. Demonstrates value and respect for their own artwork and that of their peers.
6. Shows appreciation for a variety of artwork, including that of their own culture and community, as well as others.

Setting up the Environment to Help Children Reach these Benchmarks

- Set up an art area so children can access materials independently.
- Provide a variety of art materials, such as paints, modeling materials, crayons, markers, chalk, and pencils.
- Have a place where children may store unfinished artwork to continue at a later time.
- Make available a variety of washable paints both inside and outside. Put out a variety of shapes and sizes of brushes for children to experiment with, including wide, angled, fine point, foam, make-up brushes, and toothbrushes.
- Provide many different items for stamping or painting, including household items such as potato mashers and thread spools, items from nature such as leaves and sticks, and other shapes and textures.
- Provide glue or paste and materials for making collages such as craft feathers, ribbon, fabric scraps, small pom-poms, and shells.
- Use mess trays and smocks or old oversized shirts to make cleaning up easier and to keep clothes clean.
- Provide woodworking tools, wood scraps, glue, and paint in a closely supervised woodworking area.
- Include books with artwork in the library area and hang pictures on the wall. Some libraries have paintings you can check out for extended periods of time. Encourage children to talk about what they like about the pictures.

Additional Strategies to Help Children Reach these Benchmarks

- Allow children to freely create their own artwork, focusing on the creative process rather than the finished product.
- Talk with children individually about what they would like to create, the materials they will use, and how they will carry out their plans. Encourage them to spend time developing their artwork.
- Encourage children to mix primary colors and predict what color will result from the mixing. Provide white paint to mix with colors to make pastels.
- Put out play-dough of many different colors, encouraging children to mix colors as they mold and shape the play-dough with their hands, craft sticks, rolling pins, and other materials.
- Paint with golf balls and tennis balls. Have children roll the balls in a shallow container of paint. They can pick up the balls with a large spoon or set of tongs and drop the balls on a piece of paper in a box. Children can tilt the box back and forth and watch the balls roll and the lines that develop.
- Ask children to tell you about their artwork, what they like about it, how they created it, and what they might like to try in the future. Express an encouraging attitude without judgment.
- Show respect for children's art by displaying it at their level and making frames or mats to go around their artwork. Glue the artwork to a larger piece of colored construction paper, wallpaper, or tag board. Frames can also be made by folding a large piece of colored construction paper in half, cutting out the center and placing the child's artwork under the frame.
- Expose children to a variety of art from the past and present.

- Share examples of prints of famous works of art from many cultures. These can be found in books, postcards, second-hand stores, the Internet, and calendars.
- Model your own sense of wonder about various types of artwork by asking questions about how the artists created their work and what messages they were trying to convey. Prompt children to ask questions as well. Provide opportunities for children to use similar materials and techniques in the art area to create their works of art.

STANDARD 2 ~ Music

Children engage in a variety of musical activities for enjoyment and self-expression, and demonstrate an appreciation for music.

Benchmarks

1. Shows enjoyment and participates in a variety of musical and rhythmic experiences, including singing, listening, and using musical instruments.
2. Uses music to communicate and express feelings, ideas, and experiences.
3. Notices and imitates changes in vocal and instrumental music (high and low, loud and soft, etc.).
4. Shows appreciation for a variety of music, including that of their own culture and community as well as others.

Setting up the Environment to Help Children Reach these Benchmarks

- Set up a music area with different types of instruments that children can play such as xylophones, rhythm instruments, triangles, bells, and multicultural instruments, including rain-sticks, maracas, and drums.
- Play a variety of music, including classical, jazz, and multicultural music, on a CD or tape player.

Additional Strategies to Help Children Reach these Benchmarks

- Sing often with the children in large and small groups both inside and outside.
- Repeat familiar songs often so children can sing them by heart.
- Teach children simple songs with repetitive refrains. Write the words on large chart paper and point to the words as you sing to encourage literacy development.
- Make homemade musical instruments such as oatmeal box drums.
- Use household items such as pots and pans and wooden spoons as instruments.
- Talk to children about how different types of music make them feel and what they like about music.
- Model your own enjoyment of music and the feelings you have while listening to, singing, or playing music.
- Encourage children to sing along and to play instruments in rhythm with recorded music. Talk with the children about varying the tempo from fast to slow and the dynamics from loud to soft. Use this type of musical terminology when talking to children about music.
- Invite family members and people from the community to come in and play instruments and sing with the children.

STANDARD 3 ~ Creative Movement

Children engage in a variety of creative movement activities for enjoyment and self-expression, and demonstrate an appreciation for various forms of expressive movement.

Benchmarks

1. Participates in a variety of creative movement experiences, which could include dance and rhythmic activities.
2. Explores ways to move imaginatively with and without music, such as stretching, galloping, twisting, bending, swaying, marching, and clapping.
3. Uses movement to communicate and express feelings, ideas, and experiences.
4. Responds and moves to the beat, tempo, and dynamics of music.
5. Shows appreciation for a variety of expressive movement, including that of their own culture and community, as well as others.

Setting up the Environment to Help Children Reach these Benchmarks

- Play music with many different beats and rhythms, such as marches, waltzes, polkas, Reggae, Latin, folk music and jigs. Encourage children to move to the music.
- Provide streamers, ribbons, and scarves for children to use as creative movement props.

Additional Strategies to Help Children Reach these Benchmarks

- Encourage children to listen carefully to music and move according to the beat and feeling of the music.
- Clap hands and pat knees in rhythm to songs or chants.
- Play rhythm instruments or clap out the syllables in children's names.
- Sing songs or play tapes or CDs with movement directions, such as Head, Shoulders, Knees and Toes and The Hokey Pokey.
- Invite parents and community members in to teach simple dances from a variety of cultures.

STANDARD 4 ~ Dramatic Play

Children engage in pretend play for enjoyment and self-expression, and demonstrate an appreciation for various forms of dramatic expression.

Benchmarks

1. Participates in a variety of spontaneous, imaginative play experiences alone or with others and creates and engages in increasingly detailed and extended scenarios in their dramatic play.
2. Uses dramatic play to communicate and express feelings, ideas, and experiences.
3. Uses words and actions to imitate a variety of familiar stories, roles, and real-life or fantasy experiences.
4. Uses materials and props to represent objects in creative play.
5. Shows appreciation for a variety of dramatic experiences from their own culture and community as well as others, including storytelling, puppetry, and theater.

Setting up the Environment to Help Children Reach these Benchmarks

- Set up a Dramatic Play area where children can act out a variety of roles. A Housekeeping area might include dolls from a variety of cultures, doll beds and clothes, child-sized table, chairs, refrigerator, stove, and sink, dishes, pots and pans, pretend food and dress up clothes.
- Provide props for dramatic play that go along with current interests, projects or themes.
- Encourage children to act out familiar stories by providing props to go along with stories or nursery rhymes.

Additional Strategies to Help Children Reach these Benchmarks

- Take trips to local plays, puppet shows and other performances that are geared toward young children.
- Invite family members or people from the community to come in and demonstrate acting, miming or storytelling.
- Play with children in the dramatic play area by taking on a role, making suggestions, or demonstrating how to use new props or materials.
- Use role-playing during large or small group times to help children express feelings, discuss conflicts, or solve problems. For example, an adult could act out the role of a child who feels left out, and then ask the children for suggestions about how to solve the problem.



Adaptations for Individual Children

- Make sure that all areas and materials are accessible to every child.
- Use paintbrushes with large handles.
- Provide painting mitts or gloves for finger painting.
- Provide thick crayons, markers and pencils that are easier to grasp and control.
- Set up easels on the table or at the child's level to help hold paper in place and to provide a raised surface.
- Use special scissors that children can squeeze together.
- Attach musical instruments to a mitten or glove to make them easier to grasp and hold.
- Encourage children who have difficulty singing to participate in music activities by humming or some other vocalization or by playing an instrument.
- Encourage children who have difficulty with movement to move any parts of their body they can.
- Give children with hearing impairments opportunities to touch speakers as music is played, feel instruments as they are played, and to learn familiar songs in sign language.
- Support the creative expressions of each child to boost confidence and help children see value in their own work.

SOUTH DAKOTA EARLY LEARNING GUIDELINES FOR SOCIAL STUDIES



Social Studies helps children learn about themselves and their role in their family and community. In preschool we start with the child and their self-identity. Next, children learn about themselves as members of a family, and then as a member of a community. This community may be their classroom, church, or neighborhood. All social studies in preschool should be personally meaningful to the child.

Research recommends integrating the curriculum to help children understand concepts and how they are related. Integrating curriculum areas can easily be done through themes or projects. The Bank Street College of Education recommends doing long-term studies or projects based on social studies themes throughout the year. All developmental areas can be integrated into these studies. It is important that these themes, projects, or studies have personal relevance to the child. We can study families or jobs in our neighborhood, bringing in visitors from the community or taking walks in the neighborhood. A construction project next door may lead to the children becoming interested in the machines used, different types of houses, or buildings, and all could be excellent themes. While working on the social studies topic, children will also be learning new skills in literacy, mathematics, the arts, and physical development as we read books and do activities related to the topic. They will also be learning social/emotional and science skills, some of which are closely related to the Social Studies Standards.

We can assess children's progress toward meeting the standards by observing the children and watching their interactions with other children. We can also observe them trying out roles in the dramatic play area. As with all areas we want to keep in mind that the benchmarks outline the skills and knowledge children may be able to acquire by the *end* of their preschool years.

South Dakota Early Learning Guidelines for Social Studies and Learning New Languages

Standard 1 ~ Families/Cultures

Through their explorations, play, and social interactions children demonstrate an understanding of self, families, and cultures.

Standard 2 ~ Community/Civics

Through their explorations, play, and social interactions children demonstrate an understanding of what it means to be a participating member of groups and communities.

Standard 3 ~ History/Time

Through their explorations, play, and social interactions children demonstrate an understanding of the passage of time and how the past influences their future.

Standard 4 ~ Geography/Places, People, and Environments

Through their explorations, play, and social interactions children demonstrate an awareness of their physical environment and its impact on daily living.

Standard 5 ~ Economics

Through their explorations, play, and social interactions children demonstrate an understanding of how people work together to grow, produce, distribute, and consume goods and services that meet their wants and needs.

Standard 1 ~ Families/Cultures

Through their explorations, play, and social interactions children demonstrate an understanding of self, families, and cultures.

Benchmarks

1. Identifies themselves as an individual and as belonging to a family.
2. Describes what a family is and roles that family members can play.
3. Shares family traditions and daily routines and demonstrates interest in learning about the traditions of others.
4. Demonstrates understanding that there are diverse families and cultures and all have value.

Setting up the Environment to Help Children Reach these Benchmarks

- Give children opportunities to role-play in the dramatic play area.
- Display pictures of children and families from many different cultures.
- Play music from many cultures while children are playing. Bring in instruments from a variety of cultures, such as rainsticks, drums, and maracas for children to play.
- Use fabrics from various cultures to decorate the room.
- Add multicultural dolls, clothes, and other items to areas around the room, such as the dramatic play area and math area.

Additional Strategies to Help Children Reach these Benchmarks

- Ask families to bring in pictures of their families including their children. Hang at the children's eye level, checking with parents first for their permission.
- Talk with children about what makes a family and what it means to be a good family member. Read books about many different types of families, including a variety of family members and cultures.
- Invite family members to share family customs, stories, celebrations, music, dance, traditions, and dress from their culture.
- Ask families to bring in recipes to share and help prepare with the children

Standard 2 ~ Community/Civics

Through their explorations, play, and social interactions children demonstrate an understanding of what it means to be a participating member of groups and communities.

Benchmarks

1. Demonstrates confidence in expressing individual opinions and thoughts.
2. Demonstrates respect for the thoughts and opinions of others, even when different from their own.
3. Demonstrates understanding that communities are composed of groups of people who live, play, or work together and can identify communities they belong to.
4. Participates in creating and following rules and routines.
5. Takes responsibility for simple tasks that contribute to the well being of the group.

Setting up the Environment to Help Children Reach these Benchmarks

- Have interest areas or centers around the room, such as an art area, puzzle area, dramatic play area, etc. Allow children to make choices about which areas to go to and how long to spend.

Additional Strategies to Help Children Reach these Benchmarks

- Involve children in making simple decisions as a group, such as voting for which snack to have that day. Help them see democracy in action.
- Talk with children about what a neighborhood is. Take a walk around the neighborhood if possible, pointing out places of interest.
- Involve children in helping others, such as making cards for elderly.
- Ask children to help develop rules for the group.
- Help children develop leadership skills by encouraging them to help by doing simple jobs, like watering the plants or feeding the fish.
- Talk with children about symbols, such as flags, which are used to unite and identify communities.

Standard 3 ~ History/Time

Through their explorations, play, and social interactions children demonstrate an understanding of the passage of time and how the past influences their future.

Benchmarks

1. Describes past, current and future events.
2. Describe their day and coming activities in terms of daily routines (first we..., then we...).
3. Describes how a past event relates to something happening currently or in the future.
4. Shares stories or pictures about themselves in the past.

Setting up the Environment to Help Children Reach these Benchmarks

- Ask parents to bring in pictures of the children when they were younger. Hang these up around the room with parental permission.
- Make a chart with pictures, showing your schedule for the day. Hang it up in the room where both parents and children can see it.

Additional Strategies to Help Children Reach these Benchmarks

- Take pictures as you work together with the children on a long-term project. Make documentation panels with the pictures, art, and other work children have done to document things that happened during the project. Revisit the panels and discuss with the children.
- Take pictures of an event the children shared or ask children to draw pictures and then ask children to put the photos or pictures in order.
- Use terms such as yesterday, today, and tomorrow to describe events.
- Label days, or parts of the day, by what is happening, such as snack time, circle time, stay home day, swim day.
- Talk with children as they are playing. For example, in the block area, ask them to tell you about what they built yesterday and today, and how they might add to it or change based on what happened in their past building.
- Have brief sharing times with the group where children can share events that have happened in the past.
- Ask children to dictate stories while you write it down, about things that have happened in the past.
- Encourage children to retell stories you have read, including a beginning, middle and end.
- Make personal histories with photographs of the children, as infants, toddlers, and current photographs.

Standard 4 ~ Geography/Places, People, and Environments

Through their explorations, play, and social interactions children demonstrate an awareness of their physical environment and its impact on daily living.

Benchmarks

1. Describes where they live and where others live in relationship to them.
2. Identifies various living environments, such as farm, ranch, city, town, and country.
3. Describes familiar places in their environment, such as a house, classroom, park, lake, or river.
4. Draws or builds representations of familiar places with a variety of materials.
5. Identifies various weather conditions and seasons and how they affect what we wear and what we do.
6. Names resources, such as water, soil, clean air, and trees, how they help us, and how we can be good stewards of the environment.

Setting up the Environment to Help Children Reach these Benchmarks

- In the library area, provide books of many different places and different terrains, such as deserts, mountains, plains, and valleys, as well as farms, ranches, cities and towns.
- Place posters on the wall of different geographic places.
- Add maps to the dramatic play and/or block areas.
- Add clothes, including multicultural clothes, to the dramatic play area for different seasons.

Additional Strategies to Help Children Reach these Benchmarks

- When playing outside point out things that are over, under, up, down, near and far. Ask children to make these movements with their bodies.
- Take walks around the neighborhood to look at buildings, houses, schools, parks, playgrounds or other features. Observe different types of homes and/or apartments in the neighborhood.
- Go to a construction site if possible to observe workers building a house or other building. Provide materials for children to make their own representations of homes, including clay, blocks, wood working materials, paint, paper, and recycled materials.
- Take children to visit a market, restaurant, bakery, post office, library, home, or other building. Help children change the dramatic play area, to represent what they've observed during the trip.
- Show pictures and read books about homes and transportation in other countries.
- With the children, make a map of your room, your building, and a map of your playground or other nearby outside area.
- Show children pictures and books about various geographic places. Point out items, including bridge, building, hill, woods, lake, and road. Childcraft has a book called "I love the Mountains" which includes Mt. Rushmore.
- Talk about what we wear during different seasons and how the temperature changes. Talk about what people in different climates wear.
- Discuss ways we can take care of the environment, such as picking up litter and recycling. Talk about what happens when people don't take care of the environment.

Standard 5 ~ Economics

Through their explorations, play, and social interactions children demonstrate an understanding of how people work together to grow, produce, distribute, and consume goods and services that meet their wants and needs.

Benchmarks

1. Identifies several community helpers and the services they provide.
2. Describes source of simple foods, such as milk, apples, and eggs.
3. Expresses knowledge that money can be used to purchase goods.
4. Demonstrates understanding that people work to earn money to provide for their families and buy what they need.

Setting up the Environment to Help Children Reach these Benchmarks

- Set up a play store. Invite children to use play money to purchase things.

Additional Strategies to Help Children Reach these Benchmarks

- Read books about Community Helpers, such as doctors, nurses, and police officers, emphasizing their helpful role and that we don't need to fear them.
- Talk about jobs in the community, at home, and at school.
- Visit a farm if possible so children can see where much of our food comes from. Read books about food and farming. Make butter from milk, and talk about how milk comes from the cow.
- Talk with children about our basic needs: food, clothing, and shelter.
- Discuss how people work and get jobs in order to earn money to provide for their needs.
- Invite parents and community members in to talk about their jobs. Prepare questions with the children before the guest arrives to help guide the discussion.

Helpful Terms

Adaptations Changes made in a material or activity to make it more helpful or useable for an individual. Adaptive devices, such as communication boards and page-turning devices can be used for children with special needs. More information on adaptive devices can be found at http://assistivetech.sf.k12.sd.us/early_childhood.htm.

Alphabetic knowledge Rote knowledge of the alphabet, beginning with singing or memorization as in the alphabet song, and progressing to pointing to letters and saying the alphabet.

Alphabetic principle The concept that the sounds of speech can be represented by one or more letters of the alphabet. This is the knowledge that the letters in a written word match the sounds in that spoken word. The alphabetic principle includes an understanding that words that start with the same sound will begin with the same letter.

Attributes A quality or characteristic of an object, such as size, color, or shape.

Author's chair A chair in the classroom designated for students to use as they share their writing and illustrations with the other children and adults in the group.

Benchmark A single component of a larger standard. A benchmark describes what a child should know or be able to do at a specific developmental level.

Bilingual Learners Children who are acquiring more than one language. This would include children who are learning English as a new language, children raised in bilingual environments, and children who speak English and are learning their native language.

Cognitive development The development of children's ability to think, understand and learn.

Comprehension The ability to understand what is written or said.

Concepts of print Basic knowledge about written language and books, such as knowing the front and back of a book, the difference between a letter and a word, that print proceeds from left to right, and that it is print not the pictures that carries the written message.

Coping Skills The ability to use techniques to handle challenging situations, such as taking deep breaths, counting to ten and responding calmly.

Developmental continuum A predictable sequence of accomplishments that children typically go through to achieve a certain skill or goal.

Dictate Speaking aloud, often telling a story, to someone else who writes the words down.

Early literacy Young children learning about print and how it works by working with adults and other children in meaningful reading and writing activities.

Engaged Being actively involved in learning.

Environment The surroundings, indoors and outdoors, where a child lives, plays and learns.

Environmental print Words, signs, posters, and other print that are part of the everyday world around a child, including signs, food labels, logos, etc.

Environmental sounds Sounds that are part of the everyday world around a child, including music, voices, etc.

Fine Motor Skills Actions that require control of the small muscles of the body to achieve skillfulness. Examples include drawing, cutting with scissors, handwriting, and playing a musical instrument. (NASPE).

Fluency Reading smoothly, easily and consistently.

Gross Motor Skills Actions that use the large muscles of the body to achieve skillfulness. Examples include walking, jumping, skipping, and throwing (NASPE).

Interest Areas/Centers Areas within a classroom, home or childcare setting that are supplied with materials related to a certain area such as reading, writing, discovery/science, blocks, etc. to allow children to be actively engaged in hands-on learning experiences.

Invented spelling /Developmental spelling/ Estimated spelling Young children's attempts to write words using letters with which they are familiar, progressing to using letters associated with sounds they hear in words.

Journals Notebooks in which young children can experiment with the writing process, using scribbling, drawing, and their own spellings.

Language The use of sounds, signs and/or symbols as a means of communication.

Literacy Activities associated with reading and writing.

Locomotor Skills Movements that transport an individual from one place to another. Examples include rolling, walking, running, jumping, hopping, galloping, and skipping (NASPE).

Manipulatives Various objects or toys used to teach concepts through hands-on activities.

Numeral A written symbol that denotes a number and is not a variable.

Number Sense An understanding of what numbers are, how to use them, perform operations on them, and compute with them. Children demonstrate number sense by counting with understanding, using numbers to tell how many, describing order, and comparing.

One-to-One Correspondence Matching one set of items with another set of items. For example, putting one cup and one saucer together, or matching the number 1 with the first item in a set and the number 2 with the second item in the set.

Operations A mathematical process or action, such as addition or subtraction, which can be applied to numerals, expressions or objects.

Phonics The understanding that specific letters are related to specific spoken sounds (phonemes).

Physical Fitness A condition where the body is in a state of well-being and readily able to meet the physical challenges of everyday life. Most experts believe physical fitness is the result of practicing a physically active lifestyle. For young children, appropriate movement tasks and experiences can enhance overall body strength, bone density, and developmental functioning of the cardiovascular system (NASPE).

Phonological awareness The ability to think and talk about the differences in speech sounds. Children with phonological awareness can identify rhyming words and can clap out syllables in words. Phonological awareness is a broad term that includes an awareness of, or an ability to detect the following from easiest to most difficult:

Rhyme – matching the ending sounds of words

Alliteration – producing groups of words that begin with the same beginning sound

Sentence Segmentation – dividing sentences into spoken words, such as clapping for each word in a song

Syllables: either combining syllables to say words or dividing spoken words into syllables, such as clapping for each syllable when singing

Onsets and Rhyme – Onset is the beginning consonant or group of consonants and rhyme in the remainder of the syllable or word. In the word "hot," /h/ is the onset and /ot/ is the rhyme

Phonemic Awareness - The ability to hear and distinguish individual sounds (phonemes) in spoken words.

Phoneme The smallest unit of speech that distinguishes one sound from another in spoken language. For example, the word *dog* is made up of three phonemes (d-o-g). English has about 45-50 phonemes.

Predictable books Books that repeat simple, familiar words or phrases, allowing the child to predict what is coming next, such as “Sometimes it looked like spilt milk, but it wasn't spilt milk” which repeats on every page of the book.

Resiliency The ability to keep going or recover quickly through hard times or change.

Self-Efficacy One's impression of what one is capable of doing (Bandura).

Standard A general statement that describes the information and/or skills that children should know or be able to do

Statistics Collecting, organizing, and making sense of data.

Structured Physical Activity Activity planned and directed by the parent, caregiver, or teacher and designed to accommodate the preschooler's developmental level. (NASPE).

Symmetry Occurs when one side of an object is the mirror image of the other side or the ideas that things repeat themselves. Objects may have repetitive symmetry like patterns on pottery, or cyclic symmetry such as a pinwheel.

Unstructured Physical Activity Child-initiated physical activity that occurs as the child explores his or her environment (NASPE).

Appendices, including children's booklists, resource books, and a grid comparing these standards to the Head Start Outcomes and SD Kindergarten standards can be found at <http://doe.sd.gov/contentstandards/>